

ABSTRACT

A light-emitting device comprises at least one blue light emitting diode as a blue light source; at least one red light emitting diode as a red light source; and a fluorescent layer formed by mixing fluorescent powders with transparent resin; the fluorescent layer being glued to the blue light emitting diode and the red light emitting diode; the blue light emitting diode and the red light emitting diode emitting lights of different colors which are then mixed; the blue light being used to excite the fluorescent layer to emit light with wavelengths different from the blue light and red light. In another structure, a fluorescent layer is formed by mixing fluorescent powders with transparent resin; and the fluorescent layer encloses the blue light emitting diode. A transparent resin layer encloses the fluorescent layer and red light emitting diode.